TK-C205VP DOME CAMERA

JVC®

English

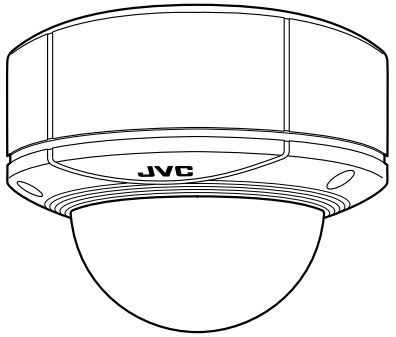
Français

Español

DOME CAMERA
CAMÉRA À DÔME
CÁMARA DOMO

TK-C205VP

INSTRUCTIONS
MANUEL D'INSTRUCTIONS
INSTRUCCIONES



JVC®

VICTOR COMPANY OF JAPAN, LIMITED

For Customer Use:
Enter below the Serial No. which is located on the body. Retain this information for future reference.

Model No. **TK-C205VP**

Serial No. _____

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Printed in Thailand
LWT0153

LWT0153

These are general IMPORTANT SAFEGUARDS and certain items may not apply to all appliances.

IMPORTANT SAFEGUARDS

1. Read all of these instructions.
2. Save these instructions for later use.
3. All warnings on the product and in the operating instructions should be adhered to.
4. Unplug this appliance system from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
5. Do not use attachments not recommended by the appliance manufacturer as they may cause hazards.
6. Do not use this appliance near water - for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.
7. Do not place this appliance on an unstable cart, stand, or table. The appliance may fall, causing serious injury to a child or adult, and serious damage to the appliance.

   Use only with a cart or stand recommended by the manufacturer, or sold with the appliance. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer. An appliance and cart combination should be moved with care.

   Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

   PORTABLE CART WARNING
   (symbol provided by RETAC)

   S3125A
8. Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to insure reliable operation of the appliance and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the appliance on a bed, sofa, rug, or other similar surface.

   This appliance should never be placed near or over a radiator or heat register. This appliance should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.
9. This appliance should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company. For appliance designed to operate from battery power, refer to the operating instructions.
10. This appliance system is equipped with a 3-wire grounding type plug (a plug having a third (grounding) pin). This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding plug.
11. For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
12. Do not allow anything to rest on the power cord. Do not locate this appliance where the cord will be abused by persons walking on it.
13. Follow all warnings and instructions marked on the appliance.
14. Do not overload wall outlets and extension cords as this can result in fire or electric shock.

15. Never push objects of any kind into this appliance through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the appliance.
16. Do not attempt to service this appliance yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
17. Unplug this appliance from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    a. When the power cord or plug is damaged or frayed.
    b. If liquid has been spilled into the appliance.
    c. If the appliance has been exposed to rain or water.
    d. If the appliance does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the appliance to normal operation.
    e. If the appliance has been dropped or the cabinet has been damaged.
    f. When the appliance exhibits a distinct change in performance - this indicates a need for service.
18. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
19. Upon completion of any service or repairs to this appliance, ask the service technician to perform routine safety checks to determine that the appliance is in safe operating condition.

Safety Precautions

FOR USA AND CANADA

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash wish arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Due to design modifications, data given in this instruction book are subject to possible change without prior notice.

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

AVERTISSEMENT:
POUR EVITER LES RISQUES D’INCENDIE OU D’ELECTROCUTION, NE PAS EXPOSER L’APPAREIL A L’HUMIDITE OU A LA PLUIE.

INFORMATION (FOR CANADA)
RENSEIGNEMENT (POUR CANADA)

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la Class B est conforme á la norme NMB-003 du Canada.

INFORMATION FOR USA

INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmfull interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

CHANGES OR MODIFICATIONS NOT APPROVED BY JVC COULD VOID USER’S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.
OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

Thank you for purchasing this product.
(These instrustions are for TK-C205VPU and TK-C205VPE)
Before beginning to operate this unit, please read the instruction manual carefully in order to make sure that the best possible performance is obtained.

English

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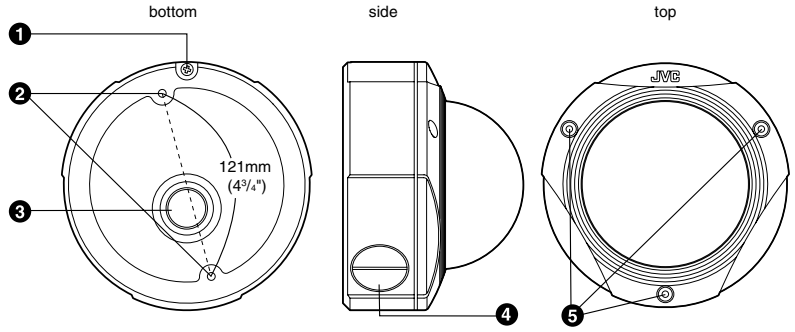
Features

- The unit can be installed directly outdoors since the dust/drip-proof structure (IP66) is unaffected by rain.
- The unit including the dome cover is designed for outdoor and indoor areas that are subject to vandalism.
- The camera uses a high-resolution 380,000 pixel (U type) / 440,000 pixel (E type), high-sensitivity CCD to realize high picture quality with horizontal resolution of 535 TV lines and S/N50dB.
- Dome-type design allows application in various locations.
- Built-in backlight compensation feature to improve the quality of video taken under backlight conditions.
- A 4inch square electrical box compatible
- Built-in white-spot correction feature

- Before starting an important recording, be sure to perform a test recording in order to confirm that a normal recording is possible.
- We do not accept liability for the loss of a recording in the case of it becoming impossible to record due to a problem

Names and Operations of Parts

Main unit bottom/side/top



❶ Safety cable installation screw

Install the safety cable using this screw.

CAUTION
Be sure to attach the safety cable. If not attached, the camera body could drop down.

❷ Mounting holes

These holes are used to mount the camera body to the ceiling. When using a 4 inch square electrical box, the 2 holes are used to fix the box in place.

CAUTION
Use screw size suitable for the mounting holes (∅4.4mm(11/64")).

❸ Conduit hole

Hole for installation to conduit hole pipe and wiring.

❹ Conduit plug & hole (side)

When the unit cannot be installed to the ceiling, the pipe is mounted to this hole for wiring.

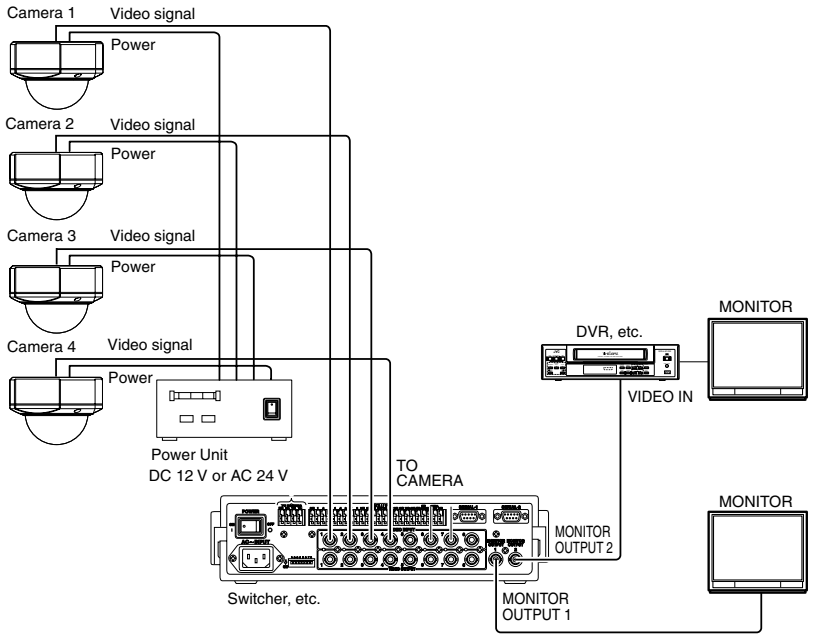
❺ Tamper-resistant screws

Tamper-resistant screws for fixing the dome cover to the base.

Use the provided wrench to install/ remove the Tamper-resistant screws.

Installation and connection

System diagram



- Turn OFF the power supply to all equipment to be used before making connections.
- Read the Instruction Manual for each piece of equipment to be used before making connections.

Installing the Dome camera

■ Install the dome camera to the ceiling by following the procedure below
- Mounting the Base to the Ceiling 10-11
- Connect the Cables to the Base 12
- Mount the Camera unit to the Base 13
- Connection for Adjustment of the Camera 13
- Adjusting the Camera Angle 14
- Attach the Dome cover 15

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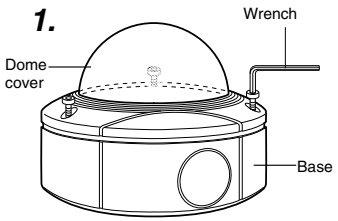
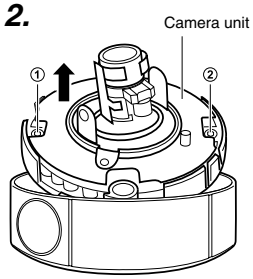
Installation and connection

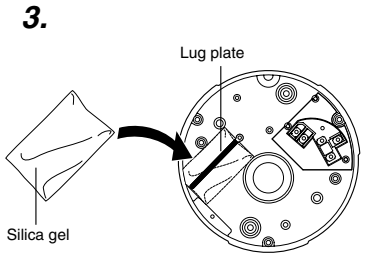
Mounting the Base to the Ceiling

Remove the camera unit from the base and mount the base to the pipe.

- Do not remove the protective sheet affixed to the dome cover until installation work is completed.
  Removing the sheet during installation may result in scratching of the dome cover.







1. Remove the dome cover from the base
Loosen the Tamper-resistant screws fixing the dome cover (3 locations) by using the provided wrench and turning counterclockwise.

2. Remove the camera unit from the base
Loosen the screws on the camera unit in the order of ① and ② and remove the camera unit from the base.

MEMO

Dome cover and camera unit are connected by the safety cable and base.

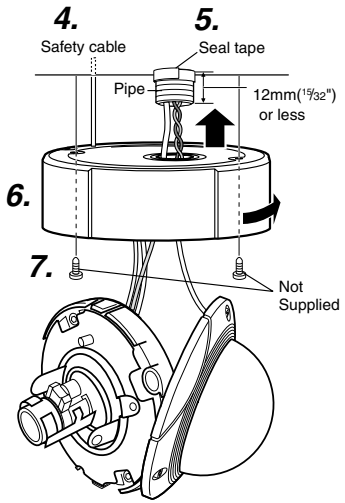
3. Insert the included Silica gel
Insert the provided silica gel in the Base interior and hold using the lug plate.

MEMO

- Always replace the silica gel when reconnecting/resetting during repair or maintenance.
  When replacing, use:
  JVC parts No. LW40500-001A

CAUTION

- When performing installation under raining conditions, take caution as not to allow rain to enter inside the unit.
- Always use the provided silica gel. When not using the silica gel, the dome cover of the camera lens may cloud as a result.



4. Connecting the safety cable
To prevent dropping, connect the unit to a sturdy location (ceiling slab or channel) and safety cable.

CAUTION

- For the used safety cable, pay particular caution to the length, strength, pull, material (insulation), etc.
- Always use the screws (M4 X 8mm) mounted on the unit.

5. Wrap seal tape
Wrap the screw section of the pipe with at least 2 rolls of seal tape.
Wrap the seal tape where the pipe-hole screws and pipe screws meet.

6. Mount the base to the pipe
Screw in the base to the pipe by turning it clockwise.
(Conduit hole: 19.1mm (3/4"))
When the Dome camera cannot be installed to the Ceiling (☞ page 16)
When installing the Dome camera to the electrical box (☞ page 17)

7. Fix the base to the ceiling
Securely tighten using screws suitable for the mounting holes (ø4.4mm(11/64")).

CAUTION

Check to make sure there is no gap between the ceiling and base.

CAUTION

- Since the camera unit and dome cover will be in a suspended state from the base by the safety cable, the camera unit and dome cover will also move when mounting the base to the pipe. Facing the camera lens to the dome-cover side at this time may cause scratching of the lens. Make sure the dome cover and camera unit are facing opposite sides.
- When screwing in the pipe into the conduit hole, do not screw in more than 12mm(15/32") to prevent damage to the pipe interior.

Connect the Cables to the Base

■ Video signal cables

Connect the coaxial cables to the coaxial cable processing terminal.

Note

Use the RG-59 or RG-6 video signal cable (coaxial cable). The RG-11 cannot be used.

- Perform the process shown on the left diagram (above illustration) for the coaxial cable tip before connecting.

■ DC 12 V or AC 24 V power supply cable

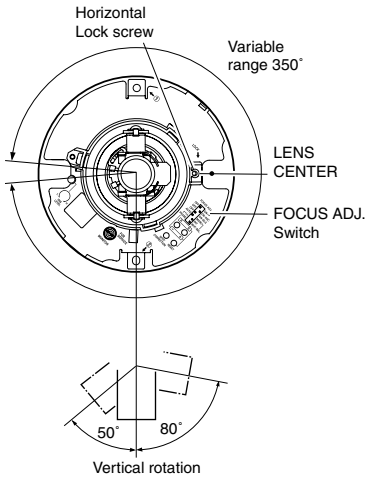
Connect a DC 12V or AC 24V power supply cable to the power supply terminal. To prevent connection errors or a cable disconnection, we recommend the use of lug plates for the connections.

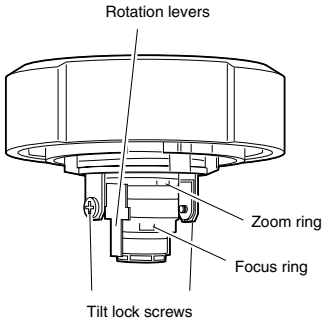
The following table shows the connection distances and connection cables provided that 2-conductor VVF cables (vinyl-insulated vinyl sheath cables) are used.

Maximum extension	100 m (330ft)	260 m (850ft)	410 m (1300ft)	500 m (1640ft)
Conductor diameter	φ 1.0mm (AWG18)	φ 1.6mm (AWG14)	φ 2.0mm (AWG12)	φ 2.6mm (AWG10)

Adjusting the Camera Angle

Camera angle, zoom and focus are adjusted.





■ Horizontal rotation (adjustable range: 350°)

1. Loosen the horizontal LOCK screw.

2. Holding the both tilt lock screws, rotate horizontally.

3. Tighten the horizontal LOCK screw.

■ Vertical rotation (adjustable range: +80°, -50°)

1. Loosen the tilt lock screws.

2. Holding the rotation levers, rotate vertically.

3. Tighten the tilt lock screws.

■ Image inclination (adjustable range: ±15°)

Manipulate the rotation levers to adjust the inclination of the image.

■ Adjusting the image size

Adjust the size using the zoom ring.

■ Adjusting the focus

Adjust using the focus ring.

1. Adjust the Iris level adjustment properly

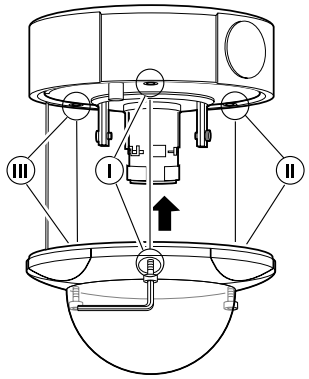
2. Turn on the Focus ADJ. This will adjust the proper exposure to be narrow depth of focus by the electronics shutter of CCD (AES) and that find out the optimized focus point easier.

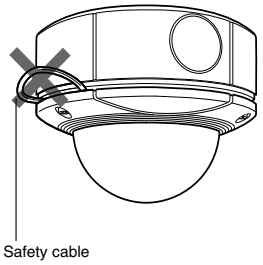
3. Adjust the focus adjustment properly. If an installation is made in the daylight, use ND filter or a dark sunglass for a fine adjustment.

4. After focus adjustment, Turn off the Focus ADJ.

Attach the Dome cover

The dome cover is mounted on the base.





1. Remove dirt and soiling on the dome cover. Otherwise, such dirt and soiling may appear in the camera image.

2. Set the dome cover to the unit by aligning the 3 marks on the base and dome cover (I, II and III).

3. Securely tighten the special screws (3 locations) using the provided wrench.

4. Remove the protective sheet affixed on the dome cover.

CAUTION

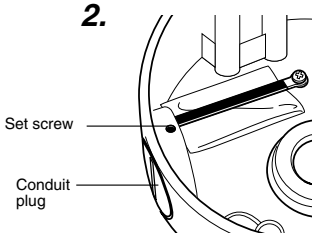
- Be sure that dome cover is firmly attached. Improper attachment could result in the cover dropping down.
- Be sure to not pinch the safety cable between the dome cover and base. Water proof and dustproof features may not perform properly as aresult.
- Insert the safety cable of the dome cover in the space between the base and camera unit.

English

When the Dome camera cannot be installed to the Ceiling

When installation cannot be made to the ceiling, use the conduit hole on the main unit side to install to the pipe.

2.



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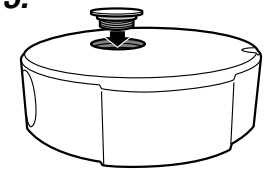

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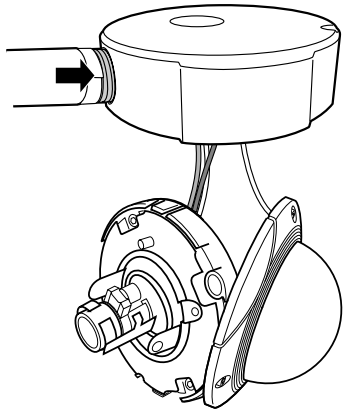


1. Follow steps 1 ~ 5 of Mounting the Base to the Ceiling.
(☞ page 10 & 11)

2. Loosen the set screws (M3 × 6mm) with a flat-head screwdriver and remove the plug on the main unit side.

3. Insert the removed plug into the conduit hole on the bottom of the camera.

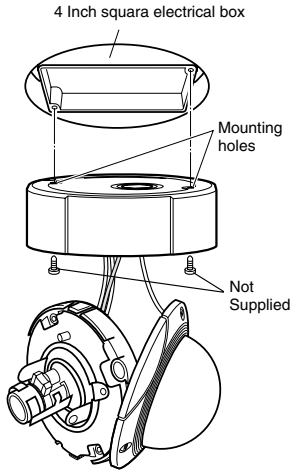
4. Screw in the pipe into the conduit hole on the main unit side.

CAUTION
When installing the pipe to the conduit hole (side), do not screw in the thread portion of the pipe more than 12mm(15/32"). Screwing in the pipe into the base more than required may damage the base interior.

5. Steps hereafter are the same as when installing the dome camera to the ceiling. See pages 12 through 15.

When installing the Dome camera to the electrical box

When installation cannot be made using the conduit holes, install the dome camera to the electrical box.



1. Follow steps 1 ~ 3 of Mounting the Base to the Ceiling.
(☞ page 10)

2. Use the 2 mounting holes to fix the box to the base.

CAUTION
Use M4 screws or bolts for attaching to the ceiling.

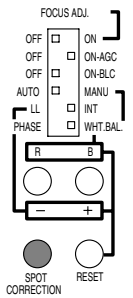
3. Steps hereafter are the same as when installing the dome camera to the ceiling. See pages 12 through 15.

English

Others

About White-spot correction

As a general characteristic unique to CCD, white spots may appear on the screen when operating under high temperature.
In order to reduce this phenomenon, this unit is equipped with a white-spot correction feature.



Usage

1. Remove the dome cover.
   - Switch on the camera power supply and wait for at least 30 minutes.
2. Cover the lens surface using a black sheet of paper, etc. so that light does not enter the lens.
3. Press and hold the SPOT CORRECTION button on the unit for more than 2 seconds.
   - White-spot correction will start. Correction may take several seconds for completion.

Memo:

- The white-spot correction feature of this unit does not guarantee the correction of all white spots.
  Maximum correction: less than 16 ~ 32 spots
  Depending on the characteristic of white spots, correction may not be possible.
- When performing white-spot correction, accurate data may not be achieved in case of highly-detailed pixels since correction is made using the information of surrounding pixels.
- The result of white-spot correction is maintained until the next correction is performed.

SPECIFICATIONS

■ CAMERA

Signal system:
U type based on NTSC standard
E type based on PAL standard
Image device: 1/4" IT CCD
Effective picture elements:
U type 380,000 pixels, 768 (H) × 494 (V)
E type 440,000 pixels, 752 (H) × 582 (V)
Sync system: Line lock/Internal
Video S/N: 50 dB (AGC OFF, Typ.)
Horizontal resolution: 535 TV lines (Typ.)
Minimum illumination: 2.0 lx (F1.2, AGC ON, 50%) (Typ.)
1.0 lx (F1.2, AGC ON, 25%) (Typ.)
White balance: ATW/Manual (switchable)
ATW: Colour temperature range 2300K to 10000K.
Backlight compensation: ON/OFF (Switchable)

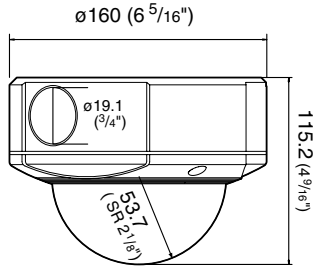
■ LENS

Focal length: 2.6 mm to 6 mm (variable)
Max. aperture ratio: F1.2 to F1.8
Angle of vision:
f = 2.6 mm
82° (H) × 59° (V)
f = 6 mm
35° (H) × 26° (V)
Angle adjustment range:
Horizontal: 350°
Vertical: +80°, –50°
Tilt: ±15°

■ GENERAL

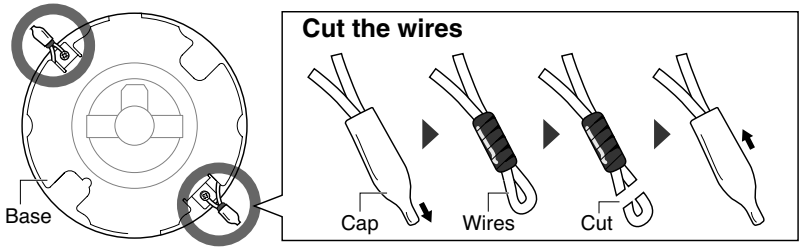
Power requirement: AC 24 V ∿ 50 Hz / 60 Hz or DC 12 V ⎓
Power consumption:
U type Approx. 4.2 W
E type Approx. 300 mA
Mass: 1.3 kg
Operating temperature: –10°C to 50°C (14°F to 122°F) (recommended: 0°C to 40°C) (32°F to 104°F)
Dimensions: Approx. 160 mm diameter × 115.2 mm
Accessories:
- U type
  - Instructions × 1
  - Warranty card × 1
  - Service information card × 1
  - Wrench × 1
  - Silica gel × 1 (Parts No. LW40500-001A)
- E type
  - Instructions × 2
  - Wrench × 1
  - Silica gel × 1 (Parts No. LW40500-001A)

■ External dimensions [Unit: mm (inches)]



- Design and specifications are subject to change without notice.

English



Note when installing

English

The base of this unit is noninsulated with the internal board grounding. When installing this unit to the conduit, always cut off the wires (2 pieces) as shown in the diagram above. Influence from devices that easily emit noise (power pumps, air conditioners, lighting, etc.) and dielectric effects from lightning can be reduced by insulating the base.